COLLEGE OF NATURAL RESOURCES

PRIDE POINTS

A Tradition of Transformation

As a leader in natural resource education, research and service, our systems-based perspective focuses on problem-solving and integration of the natural and social sciences, delivering relevant, community-focused solutions which transform research, economies, environments, and lives.

By working together at the intersection of science, engineering and social science we are creating a healthy and sustainable tomorrow.

More CNR facts @ go.ncsu.edu/cnr-at-a-glance

TEACHING & LEARNING

- Our students include winners of the prestigious Udall, Hollings, Park and Caldwell Scholarships
- Home of the first recreation education program accredited in U.S.
- NC State’s first “Engaged College” - All undergraduate students engage in experiential learning (internships, service learning, and summer professional experiences) where they apply what they learn in class to problems faced by real communities and businesses.
- Colleges across campus follow our lead in the creation of student leadership and diversity initiatives including our Engaging Leaders and CNR Ambassador programs and our Community for Diversity Lecture Series.
- Founded the first and most successful National Environmentors University Chapter promoting youth interest in natural resource sciences through extensive professionally mentored research experiences.
- In a changing world, we can never stop learning. We support life-long learning through a broad array of professional education options from workshops, seminars and short courses offered by our Recreation Resources Service, Forestry and Environmental Outreach Program, Oglebay School and our Extension units, to certificate programs and online professional master’s degrees.

RESEARCH & DISCOVERY

- National Leader in 1 of 5 NIFA Bioenergy grants and 1 of 3 NIFA Climate Change grants
- Lead institution for 2 NSF Industry-University Cooperative Research Centers
- Home to the Center for Advanced Forestry System (CAFS), the 2nd largest NSF Industry/University Cooperative Research Center with partners from 9 universities and 100 industries, agencies & non-profits
- Largest McIntire-Stennis Program in the country ( $1.2 Million)
- Birthplace of the BioResources Journal, an innovative open-access, web-based peer-reviewed journal dedicated to promoting scientific discourse and fostering scientific developments related to sustainable manufacture involving lignocellulosic or woody biomass resources.
- Pioneer in the creation of the university/industry/government & NGO research cooperative concept. Today our successful cooperatives include the NC State Cooperative Tree Improvement Program, Camcore International Tree Breeding and Conservation Cooperative, Forest Productivity Cooperative, Forest Biotechnology Industrial Research Cooperative and the Center for Bioenergy research and Development

OUTREACH & IMPACT

- Our alumni include an NC Lieutenant Governor, a University President, a 5 Star General, an NFL Quarterback plus numerous state and federal agency directors, corporate CEO’s and executives, entrepreneurs, researchers and leading academics.
- We serve three of NC’s top industries – tourism, forestry and forest products, contributing millions to North Carolina’s economy

OUR WORK
WE'RE PROUD OF OUR WORK!

A World Leader in Cellulosic Biofuels: The USDA has a goal of producing almost 50% of the next generation of biofuels in the Southeastern US. Forest Biomaterials researchers are investigating the economics, supply chain, and processes for creating biofuels from wood. Partnering with experts from our Department of Forestry and Environmental Resources allows NC State to examine the biofuels production process from the forest to the end user. Economically and environmentally sustainable production of biofuels will be an important piece of the puzzle when solving the nation’s energy problems.

Center for Earth Observation: Whether it’s climate change or natural resources monitoring, the CEO is critical to understanding the world around us. Led by Dr. Hugh Devine, CEO is using advanced computing, visualization, and sensors to monitor the earth and providing vital data and analysis for environmental decision making about climate change, land use and natural resource monitoring.

Sustainability in Action: CNR is taking aim at the challenge of building a sustainable world. Research and teaching efforts from Dr. Rich Venditti’s Life Cycle Assessment (LCA) class to Dr. Jon Casper’s green-gating concept are addressing sustainability in nearly all facets of our lives. College-wide teamwork has looked at the carbon footprint of youth hockey, monitoring the travel habit of youth players in NC. With the NC State Athletics Department, we’re looking at how to make your football tailgate “green.” Evaluating the sustainability of forest products, including biofuels, cardboard boxes and decking, has made us a leader in sustainability materials. Soon we will offer the first sustainability curriculum minor on campus!

Forest Biotechnology: Investigating the molecular biology and genetics of trees, a team led by Drs. Vincent Chaing and Ron Sederoff are increasing our understanding how a tree forms wood. The vision? Trees created to be more productive in the forest - genetically modified to adapt to climate change and better for producing biofuels; and the potential to make the American Chestnut the first species to be saved from extinction by genetic manipulation.

Investigating Places for Active Recreation in Communities: Obesity and sedentary lifestyles continue to be leading public health concerns in the U.S. Only about a quarter of the U.S. population engages in the recommended amount of physical activity daily; and a nearly quarter of the population is inactive. IPARC researchers are advancing the science of how parks, recreation and sports environments- promote active living, are influencing the development of evidence-based policy, and are enhancing opportunities for physical activity leading to enhanced quality of life.

Sentinel Lands: The U.S. military has significant presence in North Carolina, leaving a major footprint on both the landscape and the economies of surrounding communities. The Sentinel Lands program, led by Dr. Bob Bardon and Dr. Dennis Hazel, partners with the United States Marine Corps to preserve the current landscape in the eastern part of NC. Together, we are bringing together partners from across the state to provide market based conservation solutions that protect the land while living in harmony with military training needs. This pilot program has the promise to be a model for the entire country.

BioResources Journal: Scientists today are communicating and sharing information in new ways. A vision of academic freedom and collaboration was the inspiration for the BioResources open-access journal. Conceived by pioneers, Drs. Martin Hubbe and Lucian Lucia, the on-line journal is offered free with open access through the internet. A print version is also available with no page charges required. Suggested donation is requested to pay for editorial managers. BioResources’ success has pushed it to the number two position in the field in only a few short years.

History of Growing the Nation’s Forests: The roots of the College of Natural Resources’ history are in cooperative work with forest landowners. As a result, NC State has its imprint on managing and growing working forests throughout the southeast. From tree improvement programs to patented seed strains for pine trees, NC State is a leader in forestry practices. The influence of our cooperative research extends beyond the United States with the Camcore cooperative which is helping improve forests in developing parts of the world. Partnerships like these will ensure that forests are a sustainable resource for building materials, packaging materials, and fuels well into the future.

People First Tourism Initiative: P1T has developed innovative web-to-cell software that supports market-based economic development and environmental conservation projects and scholarship, helping rural communities build on existing assets and thrive.

Forests, Conservation, Production, and Play: We approach our natural resources from all angles. The college works with industrial partners to manage and improve commercial timber stands for greater productivity, and sustainability. We also work to understand the flora and fauna living in the forest, how the forest will adapt to a changing world, and the utility of the many products that can come from the forest. We understand that people have a connection to our natural resources for recreation, health and well-being, so we study how all aspects of our natural resources come together and how society interacts with them.

Agritourism and Farm Entrepreneurial Diversification: Communities are preserving family farms and their heritage through innovative ways to diversify their economic portfolio, especially through agritourism with help from our tourism extension unit.

Family and Community Forestry Extension Programs: Sound research-based information and education enable North Carolinians to make informed decisions concerning the management, enhancement and enjoyment of their forest resources assisted by the experts in extension forestry group.

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